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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,560	09/30/2003	Toshifumi Otsubo	2038-298	6441

22429 7590 04/19/2005

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EXAMINER

PICKETT, JOHN G

ART UNIT	PAPER NUMBER
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3728

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/673,560

Applicant(s)

OTSUBO, TOSHIFUMI

Examiner

Gregory Pickett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This Office Action acknowledges the applicant's Amendment submitted 1 February 2005. Claims 1-20 are pending in the application. Claims 4-20 are new.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

3. Claims 1-5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan et al (US 4,326,528; hereinafter Ryan) in view of Schmidt et al (US 5,380,094; hereinafter Schmidt).

Regarding claim 1, Ryan discloses a folded disposable diaper with a front and rear waist region, a crotch region, and transversely opposite lateral portions of the front and rear regions attached to form a waist hole and leg holes (see Figures 2 and 3). The transversely opposite portions folded inwardly along fold lines that intersect an edge of one of the leg holes (see Figures 1, 4, and 7).

Ryan lacks, or does not expressly disclose a plurality of said diapers within a flexible sheet bag.

Schmidt discloses a bag 10 for a plurality of diapers 20 and stored in a state of compression (Col. 3, lines 45-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the diapers of Ryan in a bag as

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taught by Schmidt in order to provide a plurality of diapers to the consumer within a single container.

As to claim 2, Ryan discloses a liquid absorbent core as claimed (see Figure 2).

Regarding claim 3, Ryan-Schmidt, as applied to claim 2 above discloses the claimed invention except for the specific compressive force. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the assembly of Ryan-Schmidt in the claimed compressive force ranges in order to ensure appropriate material stresses in addition to ease of product withdrawal (note: Schmidt incorporates Muckenfuhs US 5,054,619 by reference, which discloses that ease of product withdrawal is a desirable property in Col. 2, lines 56-66). It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

As to claim 4, Schmidt teaches compact, flat diapers (see Figure 1).

As to claim 5, Ryan discloses straight line folds intersecting with the edges of the leg holes and the leg holes curved inwardly.

As to claim 11, Ryan-Schmidt, as applied to claim 3 above, discloses the claimed invention.

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan-Schmidt as applied to claim 1 above, and further in view of Sengewald (US 5,219,229).

Ryan-Schmidt discloses the claimed invention (including the box shape in Schmidt Figure 1) except for the handle.

Sengewald discloses a handle 18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the package of Ryan-Schmidt with a handle as taught by Sengewald in order to assist the user in carrying the package.

5. Claims 1-4, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Woon et al (US 4,050,462; hereinafter Woon) in view of Schmidt.

Regarding claim 1, Woon discloses a folded disposable diaper with a front and rear waist region, a crotch region, and transversely opposite lateral portions of the front and rear regions attached to form a waist hole and leg holes (see Figures 1 and 6). The transversely opposite portions folded inwardly along fold lines that intersect an edge of one of the leg holes (see Figure 6).

Woon lacks, or does not expressly disclose a plurality of said diapers within a flexible sheet bag.

Schmidt discloses a bag 10 for a plurality of diapers 20 and stored in a state of compression (Col. 3, lines 45-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the diapers of Woon in a bag as taught by Schmidt in order to provide a plurality of diapers to the consumer within a single container.

As to claim 2, Woon discloses a liquid absorbent core as claimed (see Figure 1).

Regarding claim 3, Woon-Schmidt, as applied to claim 2 above discloses the claimed invention except for the specific compressive force. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the assembly of Woon-Schmidt in the claimed compressive force ranges in order to ensure appropriate material stresses in addition to ease of product withdrawal (note: Schmidt incorporates Muckenfuhs US 5,054,619 by reference, which discloses that ease of product withdrawal is a desirable property in Col. 2, lines 56-66). It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

As to claim 4, Schmidt teaches compact, flat diapers (see Figure 1).

As to claim 6, Woon has an outer contour as claimed.

As to claim 7, the folded portions of Woon curve inwardly and are tucked inwardly while the edge 20 is exposed.

As to claim 8, edge part 20 of Woon is exposed.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Woon--Schmidt as applied to claim 1 above, and further in view of Sengewald (US 5,219,229).

Woon--Schmidt discloses the claimed invention (including the box shape in Schmidt Figure 1) except for the handle.

Sengewald discloses a handle 18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the package of Woon--

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Schmidt with a handle as taught by Sengewald in order to assist the user in carrying the package.

7. Claims 1-3, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al (US 6,312,420; hereinafter Sasaki) in view of Schmidt and either Woon or Ryan.

Regarding claim 1, Sasaki discloses a disposable diaper 1 with a front and rear waist region, a crotch region, and transversely opposite lateral portions of the front and rear regions attached to form a waist hole and leg holes (see Figure 1).

Sasaki lacks, or does not expressly disclose folded in lateral portions, or a plurality of said diapers within a flexible sheet bag.

Both Ryan and Woon disclose folding in lateral portion in order to present the diaper in a compact form. It would have been obvious to one of ordinary skill in the art at the time the invention was made to fold in the lateral portion of Sasaki in order to present the diaper in a compact form.

Schmidt discloses a bag 10 for a plurality of diapers 20 and stored in a state of compression (Col. 3, lines 45-48). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the diapers of Sasaki-Woon/Ryan in a bag as taught by Schmidt in order to provide a plurality of diapers to the consumer within a single container.

As to claim 2, Sasaki discloses a liquid absorbent core as claimed (see Figure 2).

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Regarding claim 3, Sasaki-Woon/Ryan-Schmidt, as applied to claim 2 above discloses the claimed invention except for the specific compressive force. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the assembly of Sasaki-Woon/Ryan-Schmidt in the claimed compressive force ranges in order to ensure appropriate material stresses in addition to ease of product withdrawal (note: Schmidt incorporates Muckenfuhs US 5,054,619 by reference, which discloses that ease of product withdrawal is a desirable property in Col. 2, lines 56-66). It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

As to claim 9, Sasaki is a pants-type diaper (see Figure 1).

8. Claims 12<sup>19</sup> are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki-Woon/Ryan-Schmidt as applied to claim 1 above, and further in view of Suzuki et al (US 6,165,160; hereinafter Suzuki).

Regarding claim 12, Sasaki-Woon/Ryan-Schmidt, as applied to claim 1 above discloses the claimed invention except for the overlapping lateral portions.

Suzuki discloses overlapping lateral portions 23 used to fold the diaper into a small arrangement (see Figure 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to overlap the lateral portions of Sasaki-Woon/Ryan-Schmidt in order to form the diaper in a compact state. The lateral portions



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of Sasaki are large and would otherwise stick out a great deal without overlapping of the lateral portions.

As to claim 13, Sasaki discloses a liquid absorbent core as claimed (see Figure 2).

As to claim 14, Sasaki-Woon/Ryan-Schmidt-Suzuki, as applied to claim 12 above discloses the claimed invention except for the specific compressive force. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the assembly of Sasaki-Woon/Ryan-Schmidt-Suzuki in the claimed compressive force ranges in order to ensure appropriate material stresses in addition to ease of product withdrawal (note: Schmidt incorporates Muckenfuhs US 5,054,619 by reference, which discloses that ease of product withdrawal is a desirable property in Col. 2, lines 56-66). It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

As to claim 15, Schmidt teaches compact, flat diapers (see Figure 1).

As to claim 16, Woon discloses the fold line at the upper portion of the leg portion, as this location would provide the most compact size its location is deemed obvious and as such the fold line would be located as claimed.

As to claims 17 and 18, the edge parts 24 of Sasaki are tucked in and do not form a part of the outer contour,

As to claim 19, Sasaki is a pants-type diaper (see Figure 1).

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9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki-Woon/Ryan-Schmidt-Suzuki as applied to claim 12 above, and further in view of Sengewald (US 5,219,229).

Sasaki-Woon/Ryan-Schmidt-Suzuki discloses the claimed invention (including the box shape in Schmidt Figure 1) except for the handle.

Sengewald discloses a handle 18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the package of Sasaki-Woon/Ryan-Schmidt-Suzuki with a handle as taught by Sengewald in order to assist the user in carrying the package.

### ***Response to Arguments***

10. Applicant's arguments filed 1 February 2005 have been fully considered but they are not persuasive.

11. In response to the applicant's arguments concerning *In re Aller*, the examiner notes that the ease of withdrawal is a results-effective variable and is a consideration in Muckenfuhs. It is therefore respectfully submitted that *In re Aller* has been used correctly and is pertinent. The features of Muckenfuhs need not be bodily incorporated into the base combination.

12. In response to the applicant's arguments that Ryan fails to show a fold line intersecting with an edge of the leg hole, the examiner respectfully submits that Ryan is

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an integral component and that folding does not separate the leg hole from the portion forming the leg hole. The portions are connected before folding and they remain connected (and therefore intersecting) when folded. Further, the examiner notes that only "an edge" is claimed, not a specific edge.

13. The examiner respectfully disagrees with the applicant's interpretation of Ryan with regards to newly presented claims 4, 5, 10, and 11. The examiner's position is presented in the rejections above.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Toyo Eizai Corp. (JP 3021190 U) discloses a pant-type diaper with the lateral portions folded inwards (see Figures 6 and 7).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the


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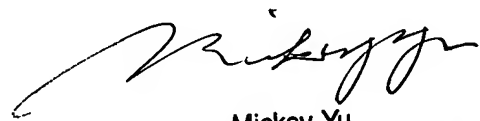
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory Pickett whose telephone number is 571-272-4560. The examiner can normally be reached on Mon-Fri, 11:30 AM - 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu can be reached on 571-272-4562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Greg Pickett  
Examiner  
16 April 2005

  
Mickey Yu  
Supervisory Patent Examiner  
Group 3700